# Types of animation in multimedia

Animation is a dynamic activity that calls for optimization of skills, unleashing of innate creativity and bringing passion to life. Animators facilitate creation of those breezy plots with characters that one may not come across in mortal plane. Animation techniques have evolved over time and proficient animators can easily secure lucrative jobs in renowned studios. If you ask any industry expert to **explain the different types of animation**, he will definitely classify the whole thing into two- 2D and 3D.

2D Animation
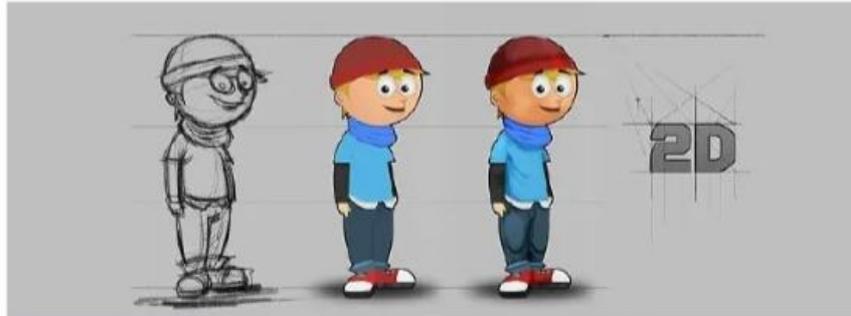
In this mode, characters are portrayed within scenes plotted in 2D visual environment. Complete visual extravaganza inclusive of effects (audio-visual), characters and ambience are created through specialized software.

During major chunk of 20th Century, animators used cels or transparent acetate sheets superimposed with paper containing drawing snaps. With the advent of computers, the method was scrapped. Instead, animators started harnessing the digital potential for image manipulation. With computers, the need for numerous image creations has been eliminated and brilliant animations can be prepared expeditiously. Sophisticated **2D animation software** has streamlined the process of image drawing for 2D artist.

This software comes bundled up with impressive toolboxes carrying an array of useful features. Such tools make morphing, smooth image transition and timing control a cushy job. An artist can resume his work from the last point and even revert to previous version if something goes wrong by availing of the features that allow saving and loading work. The spectacular software library of predefined visual elements also offers added advantage. However, sophisticated software has steep learning curve associated with it. A good 2D

artist is conversant with the functionalities of the entire array of tools that accompanies the software and thus can experiment countless **2d animation styles**.

The list of renowned 2D animation software includes Flip Boom Cartoon, SketchBook Pro by Autodesk, Anime Studio, Tab Pro, Photoshop etc.

Use of 2D animation

2D animation finds useful application in multiple industries that thrive on creativity. You may have come across amazing cartoon shows, riveting video games, movies, and anime; all of them are created in 2D animated perspective. The agility of 2D animation enhances its appeal for entertainment, multimedia and video broadcasting sectors.

Different **types of 2d animation** shows like The Simpsons are commonly broadcasted over television. Japanese anime series like Dragonball Z based on manga comics are also portrayed using this.

Movies like Snow White and the Seven Dwarves which have left an indelible impression on the psyche of audiences and have been profusely praised by critics also have relied on the power of 2D animation. Most popular animated feature series worldwide have consistently emanated from the reputed studios of the Disney. A close competitor of Disney is the Japan based movie studio, Ghilbi. Classical hits such as Castle in the Sky and others have been produced by this studio.

Super Mario, The Legend of Zelda and other video games reminiscent of the golden era of kiosk gaming had their captivating art created through 2D

computer graphics. Indie groups still produce 2D animated games in a time when 3D animation holds sway over the market.

Career opportunities

If you have a flair for **2d animation programs**, you are going to get lucrative packages from renowned companies. Your prospect of landing the dream job increases if your love for computer graphics is supported by a college degree. This perception thrives because companies assume that a prolonged exposure to contemporary animation techniques and computer graphics make you relevant for their professional needs. As a graduate, you can exhibit your artistic repertoire and technical soundness with confidence when you apply for a job. Mastering popular animation software and consistent skill enhancement would get you placed in the industry, for sure. Job profiles for you vary from game development engineer, animation artist, studio director for TV and film companies, and multimedia experts.

3D Animation

It is the most advanced and preferred **types of animation in multimedia**. Three dimensional entities manipulated in computer software aided virtual

environment give rise to 3D animation. Initially, a 3D polygon mesh that features interconnected vertices is created to get a tentative shape. Rigging of the mesh is subsequently carried out by bestowing skeletal support and armature for easy manipulation and to render the form in particular poses. Once, concomitant items and environments have been developed, computer program is used for creating scenes that produce effects more vivid than 2D animation. This procedure is classified as CGI or computer generated imagery that surfaced in the 90s. Prior to this, Claymation as well as **stop motion animation** were deployed for accomplishing a resemblance of motion by manoeuvring pictures of real life entities. 3D animation is ubiquitous now and can be seen everywhere from television to games.

For creating different **types of 3d animation**, you need a computing device and suitable 3D software with inbuilt tools that allow to model, simulate and render objects along with making provisions for adequate light, visual impact, physics and manipulation of related components. Scenes and entities that are realistically closer to life are products of 3D animation.

High octane movies such as Avatar and Star Wars would have failed to impress the audiences if 3D animation would not be present in such dramatic manner. Larger than life scenes have been executed in such facile manner that viewers were left awestruck. Even in gaming scenario, 3D characters allow for new level of fluidity which was unthought-of with 2D animation. But to gain a firm grip over 3D animation and **flash animation services**, one has to laboriously apply himself to learn the intricacies of high-end 3D animation programs. Further, the prices of the software go through the roof which implies that one needs a fat wallet to purchase them.

Animation Pre Visit Activity 2. Types of Animation.

Basic Types of Animation:

1.

• *Traditional animation* (also called cel animation or hand-drawn animation) was the process used for most animated films of the 20th century. The individual frames of a traditionally animated film are photographs of drawings, which are first drawn on paper. To create the illusion of movement, each drawing differs slightly from the one before it. The animators' drawings are traced or photocopied onto transparent acetate sheets called cels, which are filled in with paints in assigned colors or tones on the side opposite the line drawings. The completed character cels are photographed one-by-one onto motion picture film against a painted background by a rostrum camera.

2.

• *Stop-motion animation* is used to describe animation created by physically manipulating real-world objects and photographing them one frame of film at a time to create the illusion of movement. There are many different types of stop-motion animation, usually named after the type of media used to create the animation.
• *Puppet animation* typically involves stop-motion puppet figures interacting with each other in a constructed environment, in contrast to the real-world interaction in model animation. The puppets generally have an armature inside of them to keep them still and steady as well as constraining them to move at particular joints
• *Clay animation,* or Plasticine animation often abbreviated as *claymation*, uses figures made of clay or a similar malleable material to create stop-motion animation. The figures may have armature or wire frame inside of them, similar to the related puppet animation (below), that can be manipulated in order to pose the figures. Alternatively, the figures may be made entirely of clay, such as in the films of Bruce Brickford where clay creatures morph into a variety of different shapes.
• *Cutout Animation* is a type of stop-motion animation produced by moving 2 dimensional pieces of material such as paper or cloth.
• *Silhouette animation* is a variant of cutout animation in which the characters are backlit and only visible as silhouettes.
• *Model animation* refers to stop-motion animation created to interact with and exist as a part of a live-action world. Intercutting, matte effects, and split screens are often employed to blend stop-motion characters or objects with live actors and settings.
• *Go motion* is a variant of model animation which uses various techniques to create motion blur between frames of film, which is not present in traditional stop-motion. The technique was invented by Industrial Light & Magic and Phil Tippett to create special effects scenes for the film *The Empire Strikes Back* (1980).
• *Object animation* refers to the use of regular inanimate objects in stop-motion animation, as opposed to specially created items.
• *Graphic animation* uses non-drawn flat visual graphic material (photographs, newspaper clippings, magazines, etc.) which are sometimes manipulated frame-by-frame to create movement. At other times, the graphics remain stationary, while the stop-motion camera is moved to create on-screen action.
• *Pixilation* involves the use of live humans as stop motion characters. This allows for a number of surreal effects, including disappearances and reappearances, allowing people to appear to slide across the ground, and other such effects. Examples of pixilation include *The Secret Adventures of Tom Thumb* and *Angry Kid* shorts.

- *2D animation* figures are created and/or edited on the computer using 2D bitmap graphics or created and edited using 2D vector graphics. This includes automated computerized versions of traditional animation techniques such as of, interpolated morphing, onion skinning and interpolated rotoscoping.
- 2D animation has many applications, including analog computer animation, Flash animation and PowerPoint animation. Cinemagraphs are still photographs in the form of an animated GIF file of which part is animated.
- 3D Animation is digitally modeled and manipulated by an animator. In order to manipulate a mesh, it is given a digital skeletal structure that can be used to control the mesh. This process is called rigging. Various other techniques can be applied, such as mathematical functions (ex. gravity, particle simulations), simulated fur or hair, effects such as fire and water and the use of motion capture to name but a few, these techniques fall under the category of 3D dynamics. Well-made 3D animations can be difficult to distinguish from live action and are commonly used as visual effects for recent movies. Toy Story (1995, USA) is the first feature-length film to be created and rendered entirely using 3D graphics.(Wikipedia)

In the graphic organiser below name examples of types of animation:

Type	Example
Cell Animation	Akira (Japan 1988),
Stop Motion: Puppet	Coraline (USA 2009),
Stop Motion: Clay	Wallace and Gromit (UK 1989),
Stop Motion: Cutout	South Park (US 1997),
Stop Motion: Silouette	Princes et princesses (France, 2000),
Stop Motion: Model	King Kong (USA, 1933),
Stop Motion: Go Motion	The Empire Strikes Back (USA, 1980),
Stop Motion: Pixalation	The Secret Adventures of Tom Thumb (UK, 1993)
2D Animation	Princess and the Frog (USA, 2009),
3D Animation	Toy Story (1995, USA),